

B R E V I O R A

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NOTES ON AMPHISBAENIDS (AMPHISBAENIA: REPTILIA). 6. REDESCRIPTION AND RANGE EXTENSION OF *AMPHISBAENA SPURRELLI* BOULENGER.

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In 1915 Boulenger (p. 659) described the new species of *Amphisbaena spurrelli*, characterized primarily by the presence of tubercular or subconical segments on the dorsal surface of the tail. The two syntypes were collected at "Anda Goya [Colombia], at the junction of the R. Condoto and San Juan." The only subsequent record of the species (Burt and Burt, 1931, p. 40) is the citation of a single specimen (A.M.N.H. 18261) from the neighboring locality of "Boca de la Raspadura," Colombia, without supplementary description.

The present note is based upon a re-examination of these three and of two additional specimens, one of which extends the range of *A. spurrelli* into Panama. The original description has been amended and rewritten according to the standard pattern (Gans and Alexander, 1962). Simple, non-idealized illustrations are included in the present paper.

It is a pleasure to acknowledge the support of the National Science Foundation (NSF G-9054, G-21819). Examination of the types was made possible by assistance from the estate of Leo Leiser. Specimens were examined through courtesy of C. M. Bogert, The American Museum of Natural History (A.M.N.H.), Miss Alice G. C. Grandison, British Museum (Natural History) (B.M.), R. F. Inger and H. Marx, Chicago Natural History Museum (C.N.H.M.), and E. E. Williams, Museum of Comparative Zoology (M.C.Z.). I am particularly grateful to Dr. Federico Medem who made the C.N.H.M. specimens available, and to Miss C. Rhodes for technical assistance.

AMPHISBAENA SPURRELLI Boulenger, 1915.

Amphisbaena spurrelli Boulenger, 1915, p. 659. Terra typica: "Anda Goya, at the junction of the R. Condoto and San Juan," Colombia. LECTO-TYPE: B.M. 1915.10.21.9 (by present designation). PARATYPE: B.M. 1915.10.21.8.

Diagnosis: A form of *Amphisbaena* without fusions of head scales; with 4 oval [not round] precloacal pores; and with the dorsal and lateral surfaces of the caudal tip covered with conical or tubercular segments. Specimens have 218 to 222 body annuli; 18 to 20 caudal annuli; 16 to 18 dorsal and 16 to 18 ventral segments per midbody annulus; and one row of postgenial and one row of postmalar chin shields. There is no visible autotomy constriction of the tail. Autotomy takes place after the seventh annulus.

Notes on the types: Boulenger (1915, p. 659) illustrated the smaller of his syntypes, which has here been chosen as a lecto-type. The types, still extant and in good condition, suggest that his illustrations were idealized, and several of his counts [shown

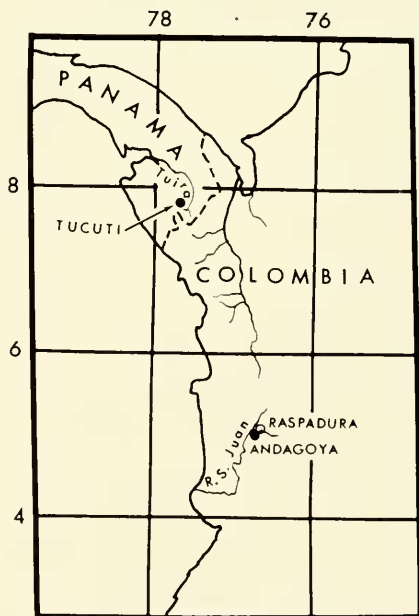


FIG. 1. *Amphisbaena spurrelli*. Map showing localities mentioned in text. Anda Goya and Boca de la Raspadura are actually closer together than can be indicated on a map drawn to this scale.

in brackets in the table] erroneous. The errors do not affect the validity of the species.

Description: Meristic characters are listed in the table. Figure 3 shows the head scalation, Figure 4 the segmentation of cloaca and tail, Figures 5 to 8 photographs of head, midbody pattern and tail.

Preserved specimens are various [faded] shades of brown dorsally, somewhat lighter ventrally. The darker dorsal color is in part produced by a darkening of the rectangular center of each segment, the contrast with the lighter segmental margins giving the impression of dark spots. The fully dark dorsal spots descend the sides to approximately the third ventral below the lateral groove on each side. Ventrad from this the dark center shrinks drastically or may fade out entirely. The anterior fifth (M.C.Z. 39784), or the head alone, lacks the dark colored segments.

The head scalation shows some variability and no major fusions. An azygous rostral barely visible in dorsal view is followed by three pairs of enlarged cephalic shields in contact along the dorsal midline. The nostrils pierce the first pair (nasals). The second pair (prefrontals) are the largest segments of the head. There are three supra- and two and a half infralabials, as the third infralabial extends considerably beyond the angulus oris. The supralabials are large, the second much the largest. The C.N.H.M. specimen has this segment subdivided differently on both sides. The second infralabials are the largest segments on the lower jaw. Small segments lie beyond the angulus oris in the position of fourth supralabials. The mental is shaped like a truncated wedge with a posteriorly convex tip. The postmental is hexagonal and elongate. It lies in lateral contact with the medial edges of the second infralabials, as well as the anterior portion of the medial edges of the relatively short, wedge-shaped malars. There are one to two rows of postgenial segments, followed by a single postmalar row, the lateral segments of which are slightly enlarged.

The head is relatively blunt, flattened slightly dorsoventrally and oval in cross-section. The lower jaw is but slightly shorter than the upper. The sides of the head would, if extended, intersect some distance anterior to the rostral tip, even in adults

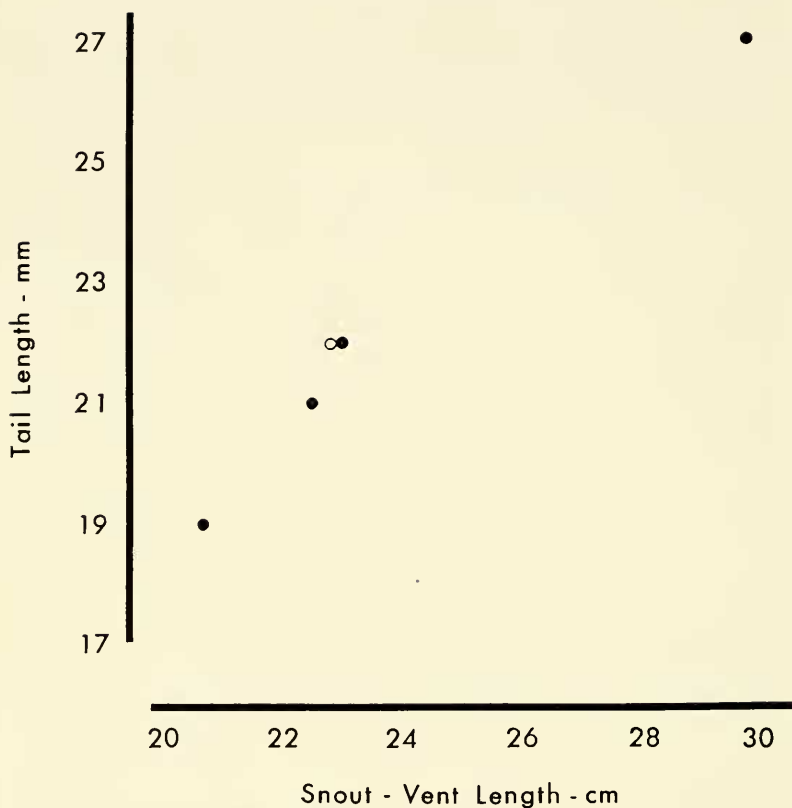


FIG. 2. *Amphisbaena spurrelli*. Scatter diagram showing plot of tail length versus snout-vent length for the available specimens. The lectotype is shown as a hollow circle.

in which the bulge of the temporal musculature changes the outline. The attachment of the skin to the crest of the skull produces a concave dishing of the interfrontal suture, particularly in adult specimens.

The first body annulus curves forward to contact the frontals. Its dorsalmost segments may be somewhat enlarged, and one of the specimens has an intercalated dorsal half-annulus. The second through fifth annuli are narrowed, and the fourth marks the level of the head joint or the point at which the bulge of the temporal musculature returns to normal.

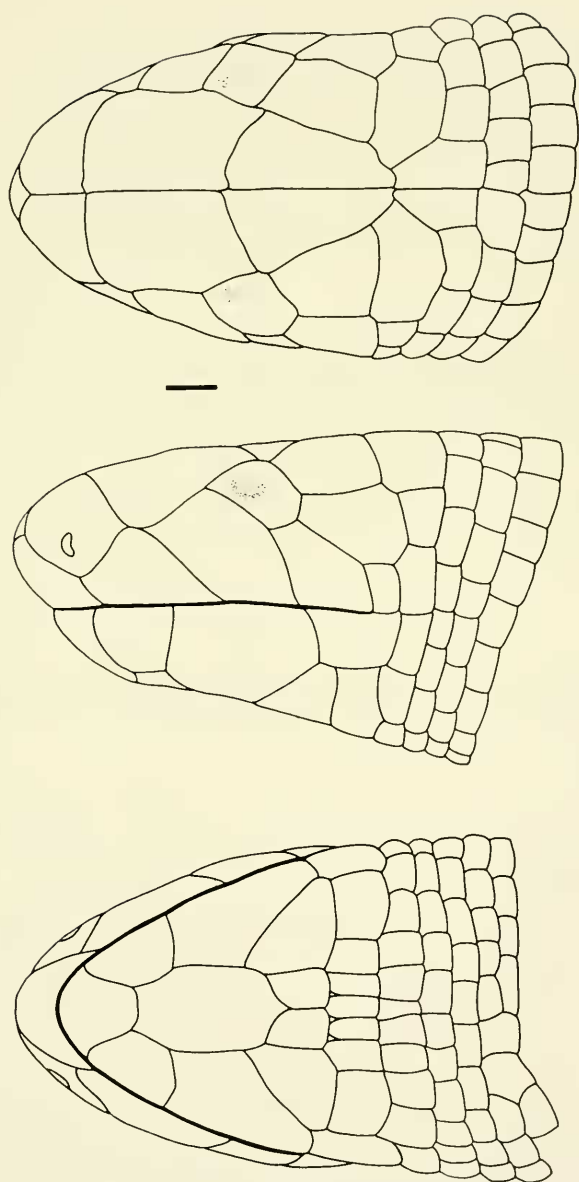


FIG. 3. *Amphisbaena spurrelli*. Dorsal, lateral and ventral views of the head of A.M.N.H. 18261 from Boca de la Raspadura, Colombia. The line equals 1 mm to scale. (V. Cummings, del.).

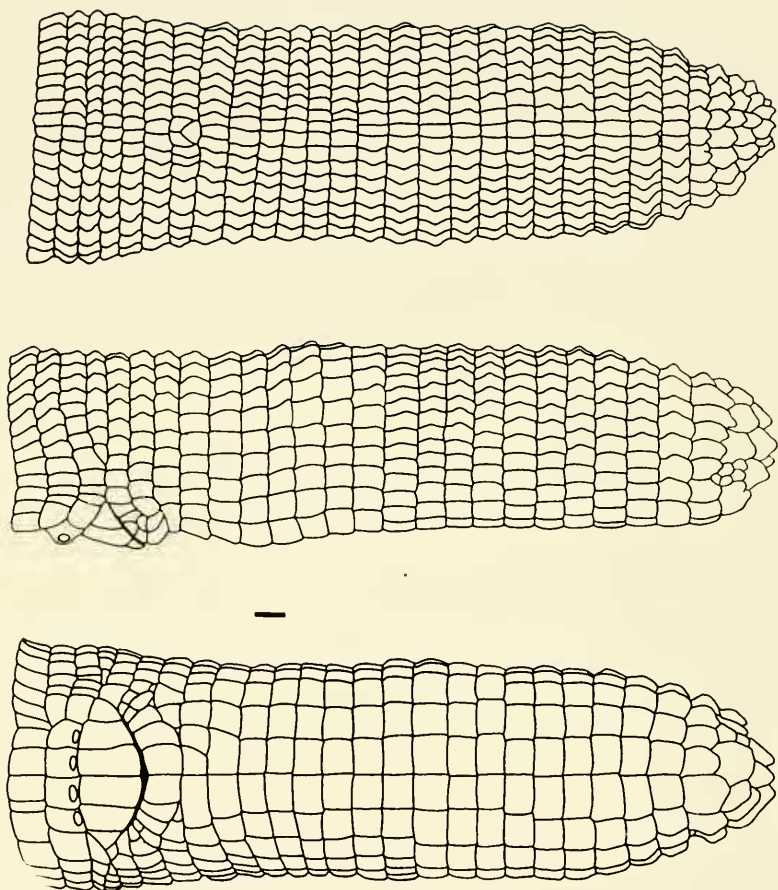


FIG. 4. *Amphisbaena spurrelli*. Dorsal, lateral and ventral views of the cloaca and tail of A.M.N.H. 18261 from Boca de la Raspadura, Colombia. Note the extent of cone formation on the tail and the flattened, slit-shaped precloacal pores. The line equals 1 mm to scale. (V. Cummings, del.).

The dorsal groove is only indicated on the head. The ventral groove is indicated mainly as a gap between aligned segments. The lateral grooves start about one and a half head lengths behind the head joint, and are well defined by a double row of triangular segmental fragments. The middorsal segments are almost twice as long as wide, the midventral segments are almost twice as wide as long.

The oval precloacal pores lie in a single uninterrupted row of normal sized segments anterior to the precloacal shield. The precloacals are characterized by a central group of four somewhat elongate segments. The postcloacals, slightly greater in number, characteristically have a set of two to four midventral and enlarged segments and, flanking these, several split segments entering the cloacal sides. The cloaca may be entirely prolapsed.

The tail becomes gradually wider posterior to the cloacal slit and somewhat higher as well. The ventral surface appears plane and an extension of the precloacal region. The terminal third of the tail shows reduction, with the tip about twice as high as wide. The segments of the dorsal and lateral surfaces are strongly tuberculate or cone-shaped. This character facilitates diagnosis of specimens with intact tails. Caudal autotomy takes place behind the seventh postcloacal annulus (cf. Vanzolini, 1951, p. 23).

Range: Lowland river valleys of northwestern South America, from extreme northern Colombia (Choco) to southern Panama.

Distribution records: COLOMBIA: Choco Province: Anda Goya, mouth of Río Condoto (Boulenger, 1915); B.M. 1915.10.21.8 (PARATYPE), 1915.10.21.9 (LECTOTYPE); C.N.H.M. 130988 [E. R. Dunn? leg. per F. Medem]. Boca de la Raspadura (Burt and Burt, 1931); A.M.N.H. 18261. PANAMA: Tuenti branch, Tuira River [H. C. Clark, leg.] M.C.Z. 39784.

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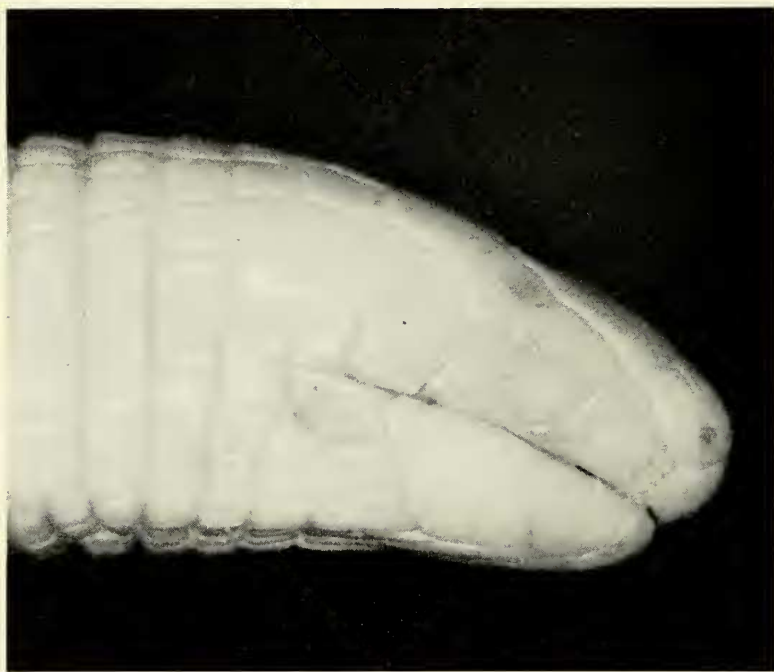


FIG. 5. *Amphisbaena spurrelli*. Lateral view of the head of the toposcope, C.N.H.M. 130988, from Anda Goya, Colombia. Note the irregular subdivision of the second supralabial.

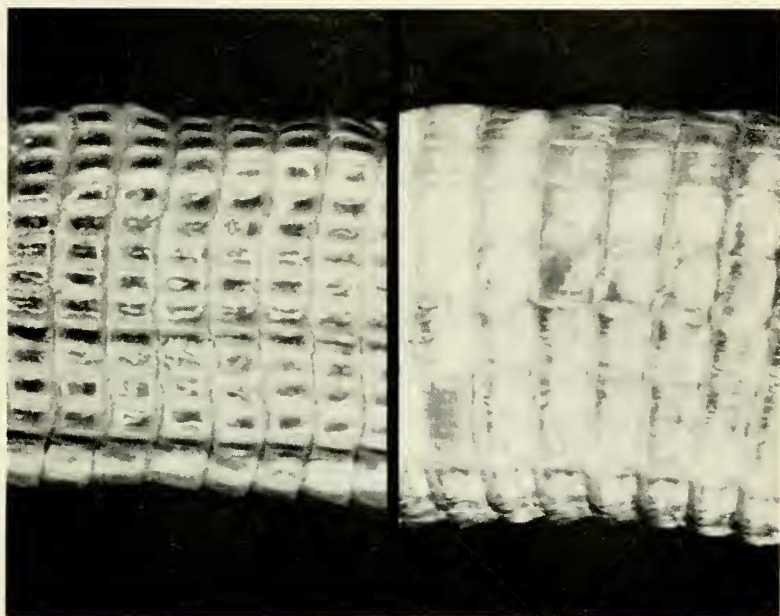


FIG. 6. *Amphisbaena spurrelli*. Dorsal (left) and ventral (right) views of A.M.N.H. specimen at midbody. Note the darkening of the dorsal segmental centers.



FIG. 7. *Amphisbaena spurrelli*. View of caudal tip cross-lighted to emphasize the knobbed nature of the terminal segments.



FIG. 8. *Amphisbaena spurrelli*. Ventral view of the cloaca and tail of the A.M.N.H. specimen. Note the onset of autotomy at annulus seven, also the contrast between the plane ventral and conical laterodorsal caudal segments.

Data for five specimens of *Amphisbaena spurrelli*

Collection and number	Body	ANNULI		SEGMENTS			Cloaca	Length
		Lat.	Tail	Dors./Vent.	Chin Segm.			
A.M.N.H. 18261	221	4	19	16/17-18	2-7		4-6-12	225+21
B.M. 1915.10.21.8	219	4	19	18/19	3-3-7		4-6	227+27
[Boulenger, 1915]	[213]		[21]	[16/18]				[320+28]
B.M. 1915.10.21.9	218	5	18	16-18/18	2-7		4-6	228+22
[Boulenger, 1915]	[214]		[23]	[18/18]				
C.N.H.M. 130988	222	4/3	19	16/16	(1)-4-8		4-6-13	230+22
M.C.Z. 39784	221	4/5	20	16/18	2-3-7		4-6-12	207+19